

1. (Amended) An electron-emitting device comprising a pair of electric conductors disposed on a substrate and a pair of films composed chiefly of carbon and connected to said pair of electric conductors and disposed with a gap interposed therebetween, wherein said films contain therein one or more kinds of elements selected from the group of lithium, potassium, sodium, calcium, strontium and barium within the range of 1 mol% to 5 mol% in terms of the percentage to carbon.

2. (Amended) An electron-emitting device comprising a pair of device electrodes disposed on a substrate, an electrically conductive film connected to said pair of device electrodes and having a fissure between the pair of device electrodes, and a carbon film composed chiefly of carbon and formed in said fissure and on an area including said fissure and having in said fissure a gap of a width narrower than said fissure, wherein said carbon film contains therein one or more kinds of elements selected from the group of lithium, potassium, sodium, calcium, strontium and barium within the range of 1 mol% to 5 mol% in terms of the percentage to carbon.

3. (Amended) An electron source comprising a plurality of electron-emitting devices according to Claim 1 or 2 disposed on a substrate, and wirings connected to said electron-emitting devices.

4. (Amended) An image forming apparatus comprising an electron source according to Claim 3, and an image forming member for effecting image formation by electrons emitted from said electron source colliding against it.

---

5. (New) An electron-emitting device comprising a pair of electric conductors disposed on a substrate and a pair of films composed chiefly of carbon and connected to said pair of electric conductors and disposed with a gap interposed therebetween, wherein said films contain therein one or more kinds of elements selected from the group of lithium, potassium, sodium, calcium, strontium and barium of 5 mol% or less in terms of the percentage of carbon.

6. (New) An electron-emitting device comprising a pair of device electrodes disposed on a substrate, an electrically conductive film connected to said pair of device electrodes and having a fissure between the pair of device electrodes, and a carbon film composed chiefly of carbon and formed in said fissure and on an area including said fissure and having in said fissure a gap of a width narrower than said fissure, wherein said carbon film contains therein one or more kinds of elements selected from the group of lithium, potassium, sodium, calcium, strontium and barium of 5 mol% or less in terms of the percentage to carbon.